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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

DICKERSON, CHAD S

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/734,211	ONISHI, AKIKO	
	Examiner	Art Unit	
	Chad Dickerson	2625	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/15/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>see attachment</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Objections*

1. Claims 1-12 objected to because of the following informalities:
  - Re claim 1: on line 6, the phrase “the whole print data” is suggested to be changed to -- to whole print data --. The claims 2-12 are objected because of their dependency on claim 1.
  - Re claim 9: on line 26, the phrase “the type of” is suggested to be changed to -- a type of --.
  - Re claim 13: on line 1, the phrase “the whole print data” is suggested to be changed to -- to whole print data --.
    - On line 14, the phrase “on the basis” is suggested to be changed to -- on a basis --.
  - Re claim 15: on line 13, the phrase “the whole print data” is suggested to be changed to -- to whole print data --.
  - Re claim 16: on line 26, the phrase “the whole print data” is suggested to be changed to -- to whole print data --.
    - On line 12, the phrase “on the basis” is suggested to be changed to -- on a basis --.
  - Re claim 17: on line 19, the phrase “the whole print data” is suggested to be changed to -- to whole print data --.
  - Re claim 18: on line 7, the phrase “the whole print data” is suggested to be changed to -- to whole print data --.

- On line 22, the phrase "on the basis" is suggested to be changed to -- on a basis --.

Appropriate correction is required.

***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 17 and 18 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Re claims 17 and 18: The claim is seeking patent protection on a seemingly patentable computer program product. However, the computer program claimed is not recited in conjunction with a physical structure, such as a computer memory or computer readable medium, in order for this claim to be treated as a computer program product. It is suggested that a physical structure be listed in the claim in order realize the functionality of the computer program and be treated as a true computer program product. See MPEP 2106.01 under Functional Descriptive Material.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-12, 15 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re claim 1: the phrase "converting the data" on line 11 renders the claim indefinite.

Does this data represent the original data or the whole print data previously mentioned in the claim? The following claim limitation will be given the broadest reasonable interpretation. Claims 2-12 are rejected because of their dependence on claim 1.

Re claim 15: the phrase "converting the data" on line 18 renders the claim indefinite.

Does this data represent the original data or the whole print data previously mentioned in the claim? The following claim limitation will be given the broadest reasonable interpretation.

Re claim 17: the phrase "converting the data" on lines 24 and 25 renders the claim indefinite. Does this data represent the original data or the whole print data previously mentioned in the claim? The following claim limitation will be given the broadest reasonable interpretation.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-3, 5-9, 11-13 and 15-18 rejected under 35 U.S.C. 102(e) as being anticipated by Mori '696 (US Pat No 7194696).

Re claim 1: Mori '696 discloses a document processing method and system, comprising:

a setting step of setting a basic setting applied to the whole print data in generating the print data, a double-sided printing setting (i.e. in Mori '696 the book attributes are also called document setting information (403), which is analogous to a basic setting applied to the whole print data. The Book attributes are applied to the attributes of all the print data pages that make up the book. One of the attributes that can be edited or changed is the Print Method attribute that refers to the Simplex, Duplex, or Bind-ready type printing; see figs. 3-4B; col. 11, lines 26-50), and a back-side setting applied to a page corresponding to a back side of a sheet serving as a printing medium in the double-sided printing setting (i.e. in Mori '696 the page attributes, which is analogous to the back-side setting, is applied to both a front and a back side of a sheet serving as a printing medium in the double-sided printing setting configured by the

book attribute. Since the page attribute performs the feature of the back-side setting, the above claim feature is performed; see fig. 6; col. 11, lines 3-50 and col. 12, lines 10-62); and

a conversion step of converting the data into the print data in accordance with the basic setting and the back-side setting set in the setting step (i.e. in the system of Mori '696, the settings of both the book attributes and the page attributes are applied to the pages in a document. These attributes are used by the book editing application in the conversion of the data to reflect the attributes set in the system. Figure 19 is an example of certain attributes in book, chapters and pages settings that effect individual pages and reflect the settings inputted by the user; see figs. 3-6 and 14-19; col. 11, lines 3-50, col. 12, lines 10-62, col. 17, lines 15-66 and col. 18, lines 1-62).

Re claim 2: The teachings of Mori '696 are disclosed above.

Mori '696 discloses the method, wherein in the conversion step, the basic setting is applied for an item other than an item having the back-side setting (i.e. in the system, when a higher level item, a book attribute, overlaps with a lower level item, a page attribute, the lower level item is given priority when it comes to what attribute to apply to a certain page. For instance, if a book attribute, considered as a basic setting, overlaps in a setting with a page attribute, considered as a back-side setting, the page attribute will be given priority and the attribute of the page will occur over the attribute of the book. Therefore, with the following example, the book setting is applied to other pages in the document that do not have an overlapping page attribute and the feature of

having the basic setting applied to an item other than an item with a back-side attribute is performed with the following example; see fig. 6; col. 11, lines 3-50 and col. 12, lines 10-62).

Re claim 3: The teachings of Mori '696 are disclosed above.

Mori '696 discloses the method, wherein in the conversion step, the back-side setting is applied to, as a unit, one side of the sheet serving as a printing medium (i.e. the page attribute changes the specific page that is authorized by the user. This page can be the back-side or the front side of a document, with a page attribute being applied. Also, the page attribute can be limited to a back-side of a sheet in the document that has a printing method using the duplex printing method. The sheet that has the page attribute serves as a printing medium that will be printed out once the printing is desired by the user; see figs. 3-6 and 14-19; col. 11, lines 3-50, col. 12, lines 10-62, col. 17, lines 15-66 and col. 18, lines 1-62).

Re claim 5: The teachings of Mori '696 are disclosed above.

Mori '696 discloses the method, wherein in the conversion step, while the basic setting and the back-side setting are referred to, various parameters necessary to convert a page corresponding to a front side of a sheet and various parameters necessary to convert a page corresponding to a back side are loaded in advance (i.e. before performing the conversion in the system, the settings from the book and page attributes for the front and back-side of the pages are set by the user and loaded into the system



after a file is specified and opened. The attributes are considered to be the parameters that allow for the necessary conversions of data into a front and back side page and are loaded into the system in advance before the actual conversion occurs to the specified document; see figs. 2-6 and 14-19; col. 7, lines 40-65, col. 8, lines 22-64, col. 11, lines 3-50, col. 12, lines 10-62, col. 17, lines 15-66 and col. 18, lines 1-62), and the parameters are alternately referred to in converting the pages (i.e. using both the book attributes and the page attributes, considered as the parameters, the data formed from the attributes are referred to in order to convert the pages in the user's desired form. Each page is converted by referring to the attributes for each page, from the first page to the last page alternately, to convert each page in the desired manner; see figs. 2-6 and 14-19; col. 7, lines 40-65, col. 8, lines 22-64, col. 11, lines 3-50, col. 12, lines 10-62, col. 17, lines 15-66 and col. 18, lines 1-62).

Re claim 6: The teachings of Mori '696 are disclosed above.

Mori '696 discloses the method, wherein in the conversion step, every time a page of interest is to be converted, various parameters for use are loaded and referred to by referring to the basic setting and the back-side setting (i.e. when a page or pages is to be converted in the system, the attributes that contribute in forming the page of interest is loaded into the system to referred to by the printer driver in order to from the desired book or document. The settings referred to are both the book attributes and the page attributes, which are both considered as the basic and back-side settings; see figs. 2-6

and 14-19; col. 7, lines 40-65, col. 8, lines 22-64, col. 9, lines 24-66 and col. 10, lines 1-30, col. 11, lines 3-50, col. 12, lines 10-62).

Re claim 7: The teachings of Mori '696 are disclosed above.

Mori '696 discloses the method, wherein the setting step comprises a sheet selection step of selecting a type of sheet serving as a printing medium, and types of sheets in the basic setting and the back-side setting are changed in accordance with the type of sheet selected in the sheet selection step (i.e. in the system, the chapter attribute is the attribute that affects the sheet selection. When the sheet selection is performed when setting the chapter attributes, this sheet selection changes the sheet types (i.e. A4 or A5), that both the book attribute and the page attribute uses in the setting of their respective attributes. Also, the sheets types used in both the page and book attributes are changed and affects the settings of both attributes. Therefore, above feature is performed; see figs. 2-6 and 14-19; col. 7, lines 40-65, col. 8, lines 1-67, col. 9, lines 1-22, col. 11, lines 3-50, col. 12, lines 10-62).

Re claim 8: The teachings of Mori '696 are disclosed above.

Mori '696 discloses the method, further comprising a step of, upon reception of a printing setting value request from an application which generates the original data (i.e. the application (101) sends a predetermined, OS-dependent, output command to an output module of the OS which provides an interface. The output command includes data regarding print setting request that are in an original file form, but incomplete until

the book editing application (104) works with the file; see fig. 1; col. 7, lines 40-65, col. 8, lines 1-67 and col. 9, lines 1-22), sending back a printing setting value for generating original data convertible into print data corresponding to the basic setting and the back-side setting in the conversion step (i.e. with the book editing application (104) detecting an output command and the incomplete original file, the book editing application sends back to the electronic original writer (102) directions to make the original file complete in a manner that applies the settings of the book and page attributes to the output commanded by the application (101). These applied settings allow the original data to be converted into printable and complete data for use by the printer driver for output; see figs. 2-6 and 14-19; col. 7, lines 40-65, col. 8, lines 1-67, col. 9, lines 1-22, col. 11, lines 3-50, col. 12, lines 10-62).

Re claim 9: The teachings of Mori '696 are disclosed above.

Mori '696 discloses the method, wherein in the setting step, the type of sheet subjected to printing can be selected (i.e. shown in figure 15, the paper size and orientation is an example of a type of sheet subjected to printing selected. In the figures, the types of sheets may be a different size and orientation; see figs. 3-6 and 14-19; col. 11, lines 3-50, col. 12, lines 10-62, col. 17, lines 15-66 and col. 18, lines 1-62), border-free printing setting can be selected for each of the basic setting and the back-side setting in accordance with the selected type of sheet (i.e. with the book attribute being analogous to the basic setting, it is clear that the border line option in figure 14 reflects the choice of having a document printing with a border or a document that is border-free. Also, the

page attributes are analogous to the back-side attributes since the page attributes deal with the front and back sides of sheets in the system. The page attributes can follow the attributes of the chapter and book attributes and because of this feature, the page attribute can have a border-free printing setting selected for the page attribute information in order to apply other page attribute editing to the selected page with the printing settings previously applied to a selected sheet; see figs. 3-6 and 14-19; col. 11, lines 3-50, col. 12, lines 10-62, col. 17, lines 15-66 and col. 18, lines 1-62), and when a type of sheet capable of border-free printing is set, a printable region of border-free printing is sent back to the application (i.e. once the user designates the option of having the page selected border-free, or no visible border line present, the editing options are sent back to the book editing application (104) from the user's input of settings to be sent to the application (101) in order for the application (101) to be able to make use of the electronic original writer (102) in order to convert an application data into an electronic original file; see figs. 1-6 and 14-19; col. 11, lines 3-50, col. 12, lines 10-62, col. 17, lines 15-66 and col. 18, lines 1-62).

Re claim 11: The teachings of Mori '696 are disclosed above.

Mori '696 discloses the method, wherein in the conversion step, when the double-sided printing setting is done in the setting step (i.e. in the book attribute level, the system allows for the document to be formatted in the duplex, or double sided, printing method; see figs. 3-6 and 14-19; col. 11, lines 3-50, col. 12, lines 10-62, col. 17, lines 15-66 and col. 18, lines 1-62), original data of one page received from the application for one plane

is converted into print data and output for all sheets subjected to printing (i.e. the front page or cover page of the document is received from an application (101) for the corresponding plane of the page and is converted into a print data when the book editing application (104) is used to convert the incomplete data into complete data that reflects the corresponding page of the duplex printing; see figs. 3-6 and 14-19; col. 11, lines 3-50, col. 12, lines 10-62, col. 17, lines 15-66 and col. 18, lines 1-62), and original data of each page received from the application for the other plane is converted into print data for the received page (i.e. the other pages that are received from the application are also converted into print data and these pages are considered to be the other plane. In the system of Mori '696, the pages, or planes of the pages, are all sent from the application (101) and converted into data edited by the book editing application (104) to make the print job received from the application a print job that reflects certain editing desired by the user and converted into a physical form; see figs. 3-6 and 14-19; col. 11, lines 3-50, col. 12, lines 10-62, col. 17, lines 15-66 and col. 18, lines 1-62).

Re claim 12: The teachings of Mori '696 are disclosed above.

Mori '696 discloses the method, wherein in the setting step, the basic setting and the back-side setting are changed in accordance with a printing setting designated in the application (i.e. the user designates in the application (101) a output command that reflects the output. The book editing application is used to designate printing changes in the book and page attributes in the system. The user is allowed in the system to enter in settings regarding the modifications of the document that are used to affect the

front and back-end of the pages. The book editing application (104) edits the document designated by the user for output with the changes of the book and page attributes; see figs. 3-6 and 14-19; col. 11, lines 3-50, col. 12, lines 10-62, col. 17, lines 15-66 and col. 18, lines 1-62).

Re claim 13: Mori '696 discloses a document processing method and system, comprising:

a step of determining a basic setting serving as a printing setting applied to the whole drawing data (i.e. when the user enters in settings regarding the book, chapter or page attributes, the book editing application determines if the settings are entered in the system. The book editing application determines when the user enters in book attribute information that affects the whole drawing data that is acquired through existing files or by the creation of the drawing data through the user's input into the system; see figs. 3-6 and 9-18; col. 7, lines 40-65, col. 8, lines 1-67, col. 9, lines 1-66, col. 10, lines 1-66, col. 15, lines 1-58, col. 17, lines 15-66 and col. 18, lines 1-62);

a step of recording in a setting table the basic setting determined in the basic setting determination step (i.e. the book setting information, considered as the basic settings, is stored on a local hard disk or a network drive. This information is stored in a structure that is similar to a setting table since it has separate data from other data in a block form shown in figure 12. Although the system does not specifically disclose a setting table, the organization of the data is similar to a table of settings pertaining to the book, chapter and page attribute information settings; see figs. 3-6 and 9-18; col. 7,

lines 40-65, col. 8, lines 1-67, col. 9, lines 1-66, col. 10, lines 1-66, col. 15, lines 1-58, col. 17, lines 15-66 and col. 18, lines 1-62);

a step of, when the drawing data is to be printed on two sides of each of sheets for a plurality of pages, determining a back-side setting applied to only pages corresponding to back sides of the sheets (i.e. in the system, a setting for the back side of the paper can be applied to only the pages that are for the back-side of the sheet when the book attribute designates the document to be in duplex form. The system uses the book edit application (104), just like the book attribute information, to determine the page attribute settings, considered as the back-side settings; see figs. 3-6 and 9-18; col. 7, lines 40-65, col. 8, lines 1-67, col. 9, lines 1-66, col. 10, lines 1-66, col. 15, lines 1-58, col. 17, lines 15-66 and col. 18, lines 1-62);

a step of recording in the setting table the back-side setting determined in the step of determining the back-side setting (i.e. as illustrated in figure 12, the book, chapter and page attribute information are stored on a local hard disk or a network drive. This information is stored in a structure that is similar to a setting table since it has separate data from other data in the block illustrated in figure 12. Along with other settings, the page attribute information, considered as the back-side settings, is stored as an electronic original file (103). Although the system does not specifically disclose a setting table, the organization of the data is similar to a table of settings pertaining to the book, chapter and page attribute information settings; see figs. 3-6 and 9-18; col. 7, lines 40-65, col. 8, lines 1-67, col. 9, lines 1-66, col. 10, lines 1-66, col. 15, lines 1-58, col. 17, lines 15-66 and col. 18, lines 1-62); and

a generation step of determining a setting used for each page of interest from the setting table and generating print data on the basis of the determined setting (i.e. in Mori '696, the despooler (105) uses the settings set in the structure in figure 12 to generate print data based on the settings of the book, chapter and page attributes information. The settings of these attributes are determined by the despooler (105) in order to determine the settings of the particular page of interest in the document or book being processed. The page of interest is represented by the information regarding the paper information, side information, physical page information and original page information. These types of information are determined by the structure shown in figure 12. Although a setting table is not specifically disclosed, the structure in figure 12, performs the feature of the setting table, which is maintaining information regarding the settings given by the user into the system; see figs. 3-6 and 9-18; col. 7, lines 40-65, col. 8, lines 1-67, col. 9, lines 1-66, col. 10, lines 1-66, col. 15, lines 1-58, col. 17, lines 15-66 and col. 18, lines 1-62).

Re claim 15: Mori '696 discloses a document processing method and system, comprising:

setting means for setting a basic setting applied to the whole print data in generating the print data, a double-sided printing setting (i.e. in Mori '696 the book attributes are also called document setting information (403), which is analogous to a basic setting applied to the whole print data. The Book attributes are applied to the attributes of all the print data pages that make up the book. One of the attributes that



can be edited or changed is the Print Method attribute that refers to the Simplex, Duplex, or Bind-ready type printing; see figs. 3-4B; col. 11, lines 26-50), and a back-side setting applied to a page corresponding to a back side of a sheet serving as a printing medium in the double-sided printing setting (i.e. in Mori '696 the page attributes, which is analogous to the back-side setting, is applied to both a front and a back side of a sheet serving as a printing medium in the double-sided printing setting configured by the book attribute. Since the page attribute performs the feature of the back-side setting, the above claim feature is performed; see fig. 6; col. 11, lines 3-50 and col. 12, lines 10-62); and

conversion means for converting the data into the print data in accordance with the basic setting and the back-side setting set by said setting means (i.e. in the system of Mori '696, the settings of both the book attributes and the page attributes are applied to the pages in a document. These attributes are used by the book editing application in the conversion of the data to reflect the attributes set in the system. Figure 19 is an example of certain attributes in book, chapters and pages settings that effect individual pages and reflect the settings inputted by the user; see figs. 3-6 and 14-19; col. 11, lines 3-50, col. 12, lines 10-62, col. 17, lines 15-66 and col. 18, lines 1-62).

Re claim 16: Mori '696 discloses a document processing method and system, comprising:

means for determining a basic setting serving as a printing setting applied to the whole drawing data (i.e. when the user enters in settings regarding the book, chapter or

page attributes, the book editing application determines if the settings are entered in the system. The book editing application determines when the user enters in book attribute information that affects the whole drawing data that is acquired through existing files or by the creation of the drawing data through the user's input into the system; see figs. 3-6 and 9-18; col. 7, lines 40-65, col. 8, lines 1-67, col. 9, lines 1-66, col. 10, lines 1-66, col. 15, lines 1-58, col. 17, lines 15-66 and col. 18, lines 1-62);

means for recording in a setting table the basic setting determined by said basic setting determination means (i.e. the book setting information, considered as the basic settings, is stored on a local hard disk or a network drive. This information is stored in a structure that is similar to a setting table since it has separate data from other data in a block form shown in figure 12. Although the system does not specifically disclose a setting table, the organization of the data is similar to a table of settings pertaining to the book, chapter and page attribute information settings; see figs. 3-6 and 9-18; col. 7, lines 40-65, col. 8, lines 1-67, col. 9, lines 1-66, col. 10, lines 1-66, col. 15, lines 1-58, col. 17, lines 15-66 and col. 18, lines 1-62);

means for, when the drawing data is to be printed on two sides of each of sheets for a plurality of pages, determining a back-side setting applied to only pages corresponding to back sides of the sheets (i.e. in the system, a setting for the back side of the paper can be applied to only the pages that are for the back-side of the sheet when the book attribute designates the document to be in duplex form. The system uses the book edit application (104), just like the book attribute information, to determine the page attribute settings, considered as the back-side settings; see figs. 3-6

and 9-18; col. 7, lines 40-65, col. 8, lines 1-67, col. 9, lines 1-66, col. 10, lines 1-66, col. 15, lines 1-58, col. 17, lines 15-66 and col. 18, lines 1-62);

means for recording in the setting table the back-side setting determined by said means for determining the back-side setting (i.e. as illustrated in figure 12, the book, chapter and page attribute information are stored on a local hard disk or a network drive. This information is stored in a structure that is similar to a setting table since it has separate data from other data in the block illustrated in figure 12. Along with other settings, the page attribute information, considered as the back-side settings, is stored as an electronic original file (103). Although the system does not specifically disclose a setting table, the organization of the data is similar to a table of settings pertaining to the book, chapter and page attribute information settings; see figs. 3-6 and 9-18; col. 7, lines 40-65, col. 8, lines 1-67, col. 9, lines 1-66, col. 10, lines 1-66, col. 15, lines 1-58, col. 17, lines 15-66 and col. 18, lines 1-62); and

generation means for determining a setting used for each page of interest from the setting table and generating print data on the basis of the determined setting (i.e. in Mori '696, the despooler (105) uses the settings set in the structure in figure 12 to generate print data based on the settings of the book, chapter and page attributes information. The settings of these attributes are determined by the despooler (105) in order to determine the settings of the particular page of interest in the document or book being processed. The page of interest is represented by the information regarding the paper information, side information, physical page information and original page information. These types of information are determined by the structure shown in figure

12. Although a setting table is not specifically disclosed, the structure in figure 12, performs the feature of the setting table, which is maintaining information regarding the settings given by the user into the system; see figs. 3-6 and 9-18; col. 7, lines 40-65, col. 8, lines 1-67, col. 9, lines 1-66, col. 10, lines 1-66, col. 15, lines 1-58, col. 17, lines 15-66 and col. 18, lines 1-62).

Re claim 17: Mori '696 discloses a document processing method and system, wherein the program includes

a code for a setting step of setting a basic setting applied to the whole print data in generating the print data, a double-sided printing setting (i.e. in Mori '696 the book attributes are also called document setting information (403), which is analogous to a basic setting applied to the whole print data. The Book attributes are applied to the attributes of all the print data pages that make up the book. One of the attributes that can be edited or changed is the Print Method attribute that refers to the Simplex, Duplex, or Bind-ready type printing; see figs. 3-4B; col. 11, lines 26-50 and col. 25, lines 67), and a back-side setting applied to a page corresponding to a back side of a sheet serving as a printing medium in the double-sided printing setting (i.e. in Mori '696 the page attributes, which is analogous to the back-side setting, is applied to both a front and a back side of a sheet serving as a printing medium in the double-sided printing setting configured by the book attribute. Since the page attribute performs the feature of the back-side setting, the above claim feature is performed; see fig. 6; col. 11, lines 3-50 and col. 12, lines 10-62); and

a code for a conversion step of converting the data into the print data in accordance with the basic setting and the back-side setting set in the setting step (i.e. in the system of Mori '696, the settings of both the book attributes and the page attributes are applied to the pages in a document. These attributes are used by the book editing application in the conversion of the data to reflect the attributes set in the system.

Figure 19 is an example of certain attributes in book, chapters and pages settings that effect individual pages and reflect the settings inputted by the user; see figs. 3-6 and 14-19; col. 11, lines 3-50, col. 12, lines 10-62, col. 17, lines 15-66 and col. 18, lines 1-62).

Re claim 18: Mori '696 discloses a document processing method and system, wherein the program includes

a code for a step of determining a basic setting serving as a printing setting applied to the whole drawing data (i.e. when the user enters in settings regarding the book, chapter or page attributes, the book editing application determines if the settings are entered in the system. The book editing application determines when the user enters in book attribute information that affects the whole drawing data that is acquired through existing files or by the creation of the drawing data through the user's input into the system; see figs. 3-6 and 9-18; col. 7, lines 40-65, col. 8, lines 1-67, col. 9, lines 1-66, col. 10, lines 1-66, col. 15, lines 1-58, col. 17, lines 15-66, col. 18, lines 1-62 and col. 25, lines 45-66);

a code for a step of recording in a setting table the basic setting determined in the basic setting determination step (i.e. the book setting information, considered as the

basic settings, is stored on a local hard disk or a network drive. This information is stored in a structure that is similar to a setting table since it has separate data from other data in a block form shown in figure 12. Although the system does not specifically disclose a setting table, the organization of the data is similar to a table of settings pertaining to the book, chapter and page attribute information settings; see figs. 3-6 and 9-18; col. 7, lines 40-65, col. 8, lines 1-67, col. 9, lines 1-66, col. 10, lines 1-66, col. 15, lines 1-58, col. 17, lines 15-66 and col. 18, lines 1-62);

a code for a step of, when the drawing data is to be printed on two sides of each of sheets for a plurality of pages, determining a back-side setting applied to only pages corresponding to back sides of the sheets (i.e. in the system, a setting for the back side of the paper can be applied to only the pages that are for the back-side of the sheet when the book attribute designates the document to be in duplex form. The system uses the book edit application (104), just like the book attribute information, to determine the page attribute settings, considered as the back-side settings; see figs. 3-6 and 9-18; col. 7, lines 40-65, col. 8, lines 1-67, col. 9, lines 1-66, col. 10, lines 1-66, col. 15, lines 1-58, col. 17, lines 15-66 and col. 18, lines 1-62);

a code for a step of recording in the setting table the back-side setting determined in the step of determining the back-side setting (i.e. as illustrated in figure 12, the book, chapter and page attribute information are stored on a local hard disk or a network drive. This information is stored in a structure that is similar to a setting table since it has separate data from other data in the block illustrated in figure 12. Along with other settings, the page attribute information, considered as the back-side settings,

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is stored as an electronic original file (103). Although the system does not specifically disclose a setting table, the organization of the data is similar to a table of settings pertaining to the book, chapter and page attribute information settings; see figs. 3-6 and 9-18; col. 7, lines 40-65, col. 8, lines 1-67, col. 9, lines 1-66, col. 10, lines 1-66, col. 15, lines 1-58, col. 17, lines 15-66 and col. 18, lines 1-62); and

a code for a generation step of determining a setting used for each page of interest from the setting table and generating print data on the basis of the determined setting (i.e. in Mori '696, the despooler (105) uses the settings set in the structure in figure 12 to generate print data based on the settings of the book, chapter and page attributes information. The settings of these attributes are determined by the despooler (105) in order to determine the settings of the particular page of interest in the document or book being processed. The page of interest is represented by the information regarding the paper information, side information, physical page information and original page information. These types of information are determined by the structure shown in figure 12. Although a setting table is not specifically disclosed, the structure in figure 12, performs the feature of the setting table, which is maintaining information regarding the settings given by the user into the system; see figs. 3-6 and 9-18; col. 7, lines 40-65, col. 8, lines 1-67, col. 9, lines 1-66, col. 10, lines 1-66, col. 15, lines 1-58, col. 17, lines 15-66 and col. 18, lines 1-62).

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 4 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mori '696 in view of Gillihan '262 (US Pat No 6842262).

Re claim 4: The teachings of Mori '696 are disclosed above.

Mori '696 discloses the method, wherein in the conversion step, data generated by an operating system is converted into the print data in accordance with the basic setting and the back-side setting while the back-side setting is preferentially applied (i.e. whether the data is imported into the system, or the file of the document already exist, the data generated by the operating system is converted into the print data that is in accordance with the book attribute information, considered as the basic setting, and the page attribute information, considered as the back-side setting. This can occur by the user setting the appropriate settings and the conversion occurring to the document, after the appropriate settings are entered in by the user and performed by the system; see figs. 3-6 and 14-19; col. 11, lines 3-50, col. 12, lines 10-62, col. 17, lines 15-66 and col. 18, lines 1-62).

However, Mori '696 fails to teach metadata.



However, this is well known in the art as evidenced by Gillihan '262. Gillihan '262 discloses metadata (i.e. an electric document can be printed from an application program to an intermediate metafile that is stored in memory. The intermediate metafile can be edited and translated into a specific PDL in order to be printed by a printer. The metafile is considered to be the metadata since the metafile is simply data that describes some other data, which is the definition of metadata; see col. 5, lines 22-29).

Therefore, in view of Gillihan '262, it would have been obvious to one of ordinary skill at the time the invention was made to have metadata in order to have data transferred to a metafile format that can be used for printing (as stated in Gillihan '262 col. 3, lines 20-36).

Re claim 14: The teachings of Mori '696 are disclosed above.

Mori '696 discloses the method, wherein the generation step comprises

a step of loading a first page of the drawing data from data generated by an operating system (i.e. in Mori '696, when the system needs to make a determination of whether a document needing to be opened is a new file or an existing file, the system loads the information into the system in a certain format depending on the preexistence of the file on the operating system. If the file, which is data that consists of an image, graphics or letters, is newly created, it is loaded in a predetermined format for newly created files. This is an example of loading a first page and other pages of data that is drawn or created by the data generated by operating system; see figs. 1-3 and 7; see

figs. 3-6 and 9-18; col. 7, lines 40-65, col. 8, lines 1-67, col. 9, lines 1-66, col. 10, lines 1-66, col. 13, lines 1-39, col. 15, lines 1-58, col. 17, lines 15-66 and col. 18, lines 1-62),

a step of converting data of the first page into print data in accordance with the basic setting and the back-side setting while preferentially applying the back-side setting (i.e. when the first page of data is loaded into the system and the page reflects data that is already existing on the operating system. The book, chapter and page attribute information is reflected in the document and the book and page attribute information is analogous to the basic and back-side setting information. In the system, the lowest level attribute information is given priority over the higher level attributes, so the page attribute information is given precedence over the book and chapter attribute information. This is analogous to a back-side setting being preferentially applied if the page and book attribute information has overlapping features applied to a document. Not only are these settings applied to a first page, but they are also applied to other pages; see figs. 1-6 and 9-18; col. 7, lines 40-65, col. 8, lines 1-67, col. 9, lines 1-66, col. 10, lines 1-66, col. 15, lines 1-58, col. 17, lines 15-66 and col. 18, lines 1-62),

a step of storing the print data of the first page (i.e. when the application is instructed to print data, the original made up of pages defined by the application is stored as an electronic original file (103) in a storage medium (103). This stores the data that is to be printed, which includes a first page, and the data to be printed is considered to be print data; see figs. 1-6 and 9-18; col. 7, lines 40-65, col. 8, lines 1-67, col. 9, lines 1-66, col. 10, lines 1-66, col. 15, lines 1-58, col. 17, lines 15-66 and col. 18, lines 1-62),

a step of loading data of each of second and subsequent pages in the drawing data from the data (i.e. in Mori '696, when the system needs to make a determination of whether a document needing to be opened is a new file or an existing file, the system loads the information into the system in a certain format depending on the preexistence of the file on the operating system. If the file, which is data that consists of an image, graphics or letters, is newly created, it is loaded in a predetermined format for newly created files. This is an example of loading a first page and other pages of data that is drawn or created by the data generated by operating system. The other pages also loaded into the system is considered as second and subsequent pages in the data drawn or created by the application (101); see figs. 1-3 and 7; see figs. 3-6 and 9-18; col. 7, lines 40-65, col. 8, lines 1-67, col. 9, lines 1-66, col. 10, lines 1-66, col. 13, lines 1-39, col. 15, lines 1-58, col. 17, lines 15-66 and col. 18, lines 1-62),

a step of converting the data of each of the second and subsequent pages into print data in accordance with the back-side setting (i.e. when the other pages of data are loaded into the system and the pages reflect data that is already existing on the operating system. The book, chapter and page attribute information is reflected in the document and the book and page attribute information is analogous to the basic and back-side setting information. Not only are these settings applied to a first page, but they are also applied to other pages; see figs. 1-6 and 9-18; col. 7, lines 40-65, col. 8, lines 1-67, col. 9, lines 1-66, col. 10, lines 1-66, col. 15, lines 1-58, col. 17, lines 15-66 and col. 18, lines 1-62),

a step of outputting the print data of the second and subsequent pages to a printer (i.e. the despooler (105) outputs the drawing data that has been edited by the book editing application (104) and this data is outputted to the printer driver (106) of the printer in the system. This feature allows for the second and subsequent pages to be output; see figs. 1-6 and 9-18; col. 7, lines 40-65, col. 8, lines 1-67, col. 9, lines 1-66, col. 10, lines 1-66, col. 15, lines 1-58, col. 17, lines 15-66 and col. 18, lines 1-62), and

However, Mori '696 fails to teach a step of outputting the print data of the first page to the printer after outputting the print data of the second and subsequent pages and metadata.

However, this is well known in the art as evidenced by Gillihan '262. Gillihan '262 discloses a step of outputting the print data of the first page to the printer after outputting the print data of the second and subsequent pages (i.e. the order in which pages are to be printed can be changed in Gillihan '262. The first page can be rearranged to another position in printing. The above claim feature of Gillihan '262 performs the feature of outputting print data of the first page after outputting the print data of the second and subsequent pages; see fig. 6; col. 4, lines 31-65) and

metadata (i.e. an electric document can be printed from an application program to an intermediate metafile that is stored in memory. The intermediate metafile can be edited and translated into a specific PDL in order to be printed by a printer. The metafile is considered to be the metadata since the metafile is simply data that describes some other data, which is the definition of metadata; see col. 5, lines 22-29).

Therefore, in view of Gillihan '262, it would have been obvious to one of ordinary skill at the time the invention was made to have the method of outputting print data of the first page to the printer after outputting the print data of the second and subsequent pages and have metadata in order to change the order in which pages are printed and to have data transferred to a metafile format that can be used for printing (as stated in Gillihan '262 col. 3, lines 20-37 and col. 4, lines 52-65).

10. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mori '696 in view of Livingston '590 (US Pat No 6621590).

Re claim 10: The teachings of Mori '696 are disclosed above.

Mori '696 discloses the method, wherein in the setting step, monochrome printing can be selected for each of the basic setting and the back-side setting (i.e. in the system, it is clear that most printing systems offer and chose to print documents in black and white. In Mori '696, it is understood that the system chooses to print documents in black and white in order to offer the print out to a user. For both the book and page attribute information, which both are considered analogous to basic and back-side settings, it is clear that the system automatically chooses the black and white, or monochrome, printing to be selected; see figs. 1-3 and 7; see figs. 3-6 and 9-18; col. 7, lines 40-65, col. 8, lines 1-67, col. 9, lines 1-66, col. 10, lines 1-66, col. 13, lines 1-39, col. 15, lines 1-58, col. 17, lines 15-66 and col. 18, lines 1-62), and printing setting is sent back to the

application (i.e. the printing settings set by the user through the book and page attributes are sent back to the book editing application and these settings are used to work with the other application (101) and the electronic original writer (102) to make a complete printable document for the system to print reflecting the editing changes; see figs. 1-3 and 12-14; see figs. 3-6 and 9-18; col. 7, lines 40-65, col. 8, lines 1-67, col. 9, lines 1-66, col. 10, lines 1-66, col. 13, lines 1-39, col. 15, lines 1-58, col. 17, lines 15-66 and col. 18, lines 1-62).

However, Mori '696 fails to teach color printing can be selected for each of the basic setting and the back-side setting, and color printing setting is sent back to the application.

However, this is well known in the art as evidenced by Livingston '590. Livingston '590 discloses color printing or monochrome printing can be selected for each of the basic setting and the back-side setting, and color printing setting is sent back to the application (i.e. Livingston '590 provides the setting for choosing color text instead of the normal black and white text. The choices of printing between the two available print color options are available. With the incorporation of this feature, once the choice is made, the color printing option in Livingston '590 can be used to be sent back to the application in the invention of Mori '696; see figs. 3-5; col. 5, lines 1-26).

Therefore, in view of Livingston '590, it would have been obvious to one of ordinary skill at the time the invention was made to have color printing or monochrome printing can selected for each of the basic setting and the back-side setting, and color printing setting is sent back to the application in order to offer the user-selectable feature of choosing color text or using black and white text (as stated in Livingston '590 col. 5, lines 1-26).


### ***Conclusion***

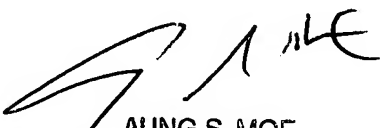
11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nara '177 (US Pub No 2003/0056177) discloses a system that is able to allow the user to input settings regarding the pages in the system and converts the pages in the system in accordance to the settings that the user desires. This includes the settings of both the front and back sides of the paper in the system. After the paper has been converted in the desired manner, it can be output to the printer in the system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chad Dickerson whose telephone number is (571)-270-1351. The examiner can normally be reached on Mon. thru Thur. 9:00-6:30 Fri. 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Aung Moe can be reached on (571)- 272-7314. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CD/   
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August 1, 2007

  
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